THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXI. THURSDAY, OCTOBER 27, 1859. No. 13.

PHTHISIS AND PLEURISY, WITH PNEUMO-HYDROTHORAX. TREATED BY PARACENTESIS THORACIS; IODINE INJECTIONS INTO THE PLEURAL CAVITY.

[Read before the Boston Society for Medical Observation, and communicated for the Boston Medical and Surgical Journal.]

BY EDWARD H. CLARKE, M.D.

W. W., an American, born of Irish parents, æt. 27, and married, applied for medical advice, March 28th, 1858. He had light hair and complexion, and reported himself to have enjoyed excellent health from his boyhood till within a year. His occupation was that of a merchant's clerk. He was not aware of the existence of phthisis in his family. His general appearance was healthy. His appetite and digestion, the condition of his bowels, his sleep, &c., were satisfactory. He sought advice on account of a cough, which had followed him for a year persistently. His cough had been accompanied with copious and thick, but never with bloody sputa. He also suffered, now and then, from slight pains through his left chest. He was in good flesh and of average strength, though his cough and thoracic pains occasionally rendered the performance of his daily duties, at the store and elsewhere, somewhat difficult. He had a clean tongue, and a good pulse of 80 per minute. On examination, vesicular respiration was heard over the whole of the right chest, front and back; it was also heard at the top of the left chest, front and back. Respiration was indistinctly heard over the lower half of the left back; and over the same space, percussion was slightly dull. Elsewhere it was good. No râles were heard anywhere.

He was placed under a careful hygienic regimen, with a plain but substantial diet. A mixture of equal parts of the tinctures of opium, hyoscyamus and conium was ordered for inhalation. He was also advised to take one drachm of the following prescription, three times a day, viz., syr. senegæ, ʒ iss., tinct. lobelia, ʒ iss., and sulph. morphia, gr. ij.

There was no marked change in his condition for several days. On April 3d, six days later, he was exposed to a draught of cold air, after being heated, and at the same time was more

thinly clad than usual. This exposure occurred in the afternoon. Soon after, he had a well-marked chill. This was followed by a restless night. On the next morning, April 4th, I found him with a pulse of 120, and with severe pain in his lower left chest. Inspiration was painful. A full breath could not be taken without a sharp pain in the left chest. He had very little cough. Respiration was scarcely audible over the lower and posterior half of the left lung. Percussion elicited no change of sound since the previous examination. He had vomited some yellow matter two or three times. A pill of ipecac, blue mass and opium was prescribed, to be repeated till the pain was easier. A sinapism was directed to be placed over the seat of pain, and he was put on a low diet. The mixture previously ordered was discontinued.

On the following morning, April 5th, he was a little easier. At my visit, on April 7th, he reported his cough and pain to be less. He then had a pulse of 90. His skin was not abnormally hot. He lay quiet, and could not take a full inspiration without pain. Indistinct bronchial respiration was heard over the lower half of the left back. There was no increased dulness on percussion there. His sputa were frothy and white, and not abundant. His tongue was slightly coated, and he had very little appetite. He slept pooryl. His bowels had been moved daily.

The pill, previously prescribed, was ordered to be taken only once in the twenty-four hours, and that at night. A mixture of equal parts of syr. tolu, syr. ipecac and liq. ammon. acet. was also directed, as an expectorant.

Two days later, April 9th, he reported no pain in his chest. His respiration was 28 in a minute; his pulse 96. A vesicular murmur, mingled with bronchial respiration, was heard over the lower half of his left back. No crepitation could be heard. His tongue was clean, and he asked for food. He had a daily dejection. He slept little, and uneasily. His gums were not sore, and there was no mercurial fœtor of the breath. The pill was exchanged for a nightly dose of six grains of Dover's powder. The same expectorant mixture was continued. On the next day, April 10th, his pulse rose to 100. No change was observed in the signs obtained by auscultation and percussion. He expectorated less and his cough was tighter. His bowels were costive. His hands and feet were cool rather than hot. He kept his bed most of the day, but was able to sit up part of the time. Instead of the mixture prescribed April 7th, he was ordered syr. tolu, syr. scillæ and vin. ipecac, with antimony gr. $\frac{1}{20}$ to each dose, every four hours. The Dover's powder was continued, and Rochelle salts were advised as a laxative. His diet was made moderately substantial.

Two days later, April 12th, he had a pulse of 100, and his general condition was not changed, except that his skin was hot. Bronchial respiration, mingled with an indistinct vesicular murmur, was heard over two thirds of his left back. There was also broncho-

phony there. His bowels were less costive, and his appetite was poor. In addition to the previous treatment, he was ordered four drops of the fluid extract of veratrum viride, every three hours; the quantity to be cautiously increased.

On the following day, April 13th, he reported slight nausea, but in other respects he felt about as he had done. His cough was unabated. In addition to the previous auscultatory sounds, metallic tinkling was heard in the left back, below the angle of the scapula. His pulse had fallen to 84. The veratrum was continued through the 13th, and was then omitted on account of nausea. Twelve hours after its discontinuance, his pulse rose to 100 again. It was then resumed, and in the course of the day his pulse fell to 88. For two days, during which time it was steadily taken, his pulse ranged from 80 to 88. Upon the discontinuance of veratrum, his pulse rose as before to 100. Some nausea attended the exhibition of this drug, and as no favorable results, beyond a sedative influence over the heart, was obtained by its use, it was not again tried during the case.

A week later than this, April 20th, his chest was examined, with the following result. There was dull percussion over the lower left chest; the dulness was more marked on the side than on the back. Metallic tinkling was heard just below his scapula. Vesicular respiration was heard at the apex of both lungs, front and back. Over the lower left back respiration was very indistinctly heard. His voice was bronchophonic. His breathing was 32 in a minute, and somewhat labored and feeble. His pulse was 100. He expectorated little, and his sputa were chiefly mucous. He reported a fever-turn once in twenty-four hours, and moderate, not copious, night sweats. He had a fair appetite. His bowels moved once, and sometimes twice, a day. He complained of feeling very weak and sick.

All cough mixtures were now omitted. Iodine was ordered externally and fusel oil internally, with a substantial diet. The iodide of potash was also exhibited, three times a day, in the fluid extract of wild cherry bark.

Another examination of his chest was made two days later, April 22d. The sound of percussion was then flat where it had been dull, if the patient was sitting up. If he was in the recumbent posture, and on his right side, the flat sound of the left chest gave place, on percussion, to an almost resonant tone. The sounds of the heart were most distinctly heard just on the right of the sternum. No change was made in the treatment. He kept along for a few days without any material change, except that he gradually became unable to sleep only in a semi-upright posture. His legs became somewhat anasarcous, and he could not walk about his chamber.

On the evening of April 27th, he was attacked with sudden and intense pain in his right chest, and with increased dyspnœa. He

did not lie down at all during the night. Through the next day, April 28th, he got one third of a grain of sulph. morphia at intervals, and without relief. By night his pulse was 120 and his respirations 32. Sinapisms were applied to his chest; morphia was omitted, and chloroform was given without relief. During the night, he received the last rites of the Catholic church, from a belief on the part of his friends, and one not groundlessly entertained, that he was dying. Early on the day following, he was seen by Dr. Bowditch, in consultation with myself. At that time his dyspnœa was distressing; his complexion slightly livid; his feet and legs largely swollen and œdematous. The sounds of the heart were heard loudest to the right of the right nipple. There was coarse crepitation over the entire right chest. Respiration could not be heard at all over the lower two thirds of the left chest. The sound of percussion was flat where the respiratory murmur could not be heard, but at the apex of the left chest it was so resonant as to be tympanitic. An attempt to cough produced great distress and a feeling of suffocation. His pulse was 120 and feeble; his breathing 36 in a minute.

Under these circumstances, paracentesis thoracis was determined upon. Dr. Bowditch accordingly introduced a trocar at the top of the tenth rib and at the point of greatest dulness. About five pints of a clear, straw-colored serum was drawn off. The operation was followed with an appearance of great relief. At 5, P.M., of the same day, his pulse was 106. The sounds of the heart were heard loudest upon the sternum. There was no audible crepitation in the right chest. An indistinct respiratory murmur could be heard along the lower left chest. The patient expressed infinite relief. Percussion gave a less flat sound. Two days after this, a feeble respiratory murmur was heard over nearly the whole left posterior chest. Metallic tinkling was distinct at the point where it was previously heard. Percussion was tympanitic at the apex of the left lung. His pulse ranged between 90 and 100. He was able to lie down and sleep all night. The anasarca disappeared, and his complexion assumed a natural hue. The fusel oil, ext. wild cherry and iodid. potash, which had been omitted for a few days, were resumed, and to these remedies cod-liver oil was added.

From this point his condition began to improve. By May 14th, he was able to walk around the Common, and enjoy the exercise. He reported less dyspnœa than he had suffered for several weeks before he gave up business. His pulse was 84; his appetite good; he slept well; and he had a daily dejection. An examination of his chest disclosed the following condition, at this time. The sound of percussion was flat over the lower third or fourth of the left lung, posteriorly; dull over the middle third; clear above, and tympanitic at the apex anteriorly. No respiration was heard over the lower third of the left chest; indistinct vesicular respi-

ration was heard over the middle third; and tolerably distinct vesicular breathing above. Metallic tinkling was heard as previously. He coughed moderately and easily. His sputa were mucous. The previous treatment of a good diet, counter-irritation, fusel and cod-liver oil, iodide of potash and wild cherry extract, with whiskey once or twice a day, was continued. A week after this, on May 20th, he felt so well that he resumed his business at the store. At this time, the wild cherry ext. and iod. potash were discontinued. The comp. syr. phosphates was substituted for them. No other change was made in treatment.

At the expiration of another week, on May 28th, he called at my office. He had attended to business daily. His pulse was 108 after walking. The physical signs of the chest had not changed, except that the beat of his heart was heard loudest a little to the right of the sternum; and bronchial respiration was heard over the lower left back. He was kept on the same treatment.

On June 2d, his dyspnœa and attendant uncomfortable symptoms were so much increased that he again gave up business. A few days later, on June 9th, his condition was still worse. The sound of percussion was flat as high as the third rib anteriorly, and up to the scapula posteriorly. Change of position produced a corresponding change in the dulness. The heart was so far dislocated that its beat was heard loudest to the right of the right nipple. His respiration was 40 per minute; his pulse about 120. Where the percussion was flat, no breathing was heard. By the aid of Dr. Bowditch, paracentesis thoracis was again performed. The trocar was introduced between the 9th and 10th ribs, and on the side. Not quite three quarts of *turbid* serum was drawn off. The exhibition of all drugs was now discontinued. The patient was simply directed to keep quiet.

On the day following, June 10th, he reported a night of good sleep, and expressed as much relief as after the previous operation. His pulse was 106; his respiration 24. His heart beat the loudest just to the left of the sternum. A coarse, respiratory murmur could be heard over the lower left back; it was distinct above. He had a clean tongue, and a good appetite. He was again put upon a substantial diet. Iodine was ordered as a daily external application to the left chest; and the iodide of potash in the extract of wild cherry was resumed.

From this point, he improved again, as he did after the first operation, but not to the same extent. His pulse became slower. He had less dyspnœa. He was able to walk out, for a short distance, daily. In the course of a couple of weeks, however, he began to grow worse again. He occasionally suffered from severe pain along and under the right clavicle, which was only relieved by sulphate of morphia. He also suffered from an attack of gastric pain and tenderness, accompanied with vomiting, which continued for more than a week, and passed off after the application of a blister to his epigastri-

um, and a diet of milk and bread, with lime water. In the mean time he gradually emaciated. Night sweats, which had disappeared, re-appeared. His strength visibly failed, day by day. Hectic fever was established. He suffered not infrequently from diarrhœa. His pulse and breathing grew more and more rapid. His stomach refused to tolerate either cod-liver or fusel oil; and did not bear bread, milk and meat as well as formerly.

On July 9th, one month after the second operation, he was in the following condition. He could not lie down without distress. His pulse ranged from 100 to 110. His respiration was 24 a minute. He coughed moderately, and with pain. He complained of almost constant infra-clavicular pain on the right side. Percussion gave a flat sound over the lower two thirds of his left back; above, the note was clearly resonant. The intercostal spaces were bulging out moderately. Measurement over the nipples showed the left chest to be nearly two inches larger than the right. The heart was largely dislocated to the right. Respiration was heard with difficulty on any part of the left chest. On the lower part, it was scarcely heard at all. Over the right chest percussion was everywhere normal; and vesicular, though somewhat puerile respiration was everywhere audible. Metallic tinkling was not heard at this examination, in the left chest, but it had been a little while previous.

Under these circumstances, Mr. W.'s chest was punctured for the third time. The trocar was entered between the 8th and 9th ribs, just in front of a line drawn perpendicularly from the axilla down. About four quarts of thick, offensive, sero-purulent matter was drawn off. A silver canula, with a cork adapted to its outer orifice, was left in the chest. This was kept *in situ* by means of adhesive plaster. No medicine was prescribed. The patient expressed himself greatly relieved.

He slept well that night. On the next day, July 10th, his pulse was 116; his respiration 28; the cork was removed from the canula, and about one quart of purulent matter flowed out. Two drachms of an aqueous solution of iodine, of the strength of gr. i. to ʒi., was then injected through the canula. The injection was followed by no unpleasant symptoms. He was put on a milk diet for a few days; then meat and alcoholic stimulants were added to it. In the way of drugs, the comp. syr. phosphates was prescribed, with cod-liver oil.

For a short time after this, he seemed to improve again. The cavity of the pleura was daily emptied of its contents. At first, more than a quart was drawn off. The quantity gradually diminished, till not more than three or four ounces were drawn off daily. The iodine solution was also daily injected, and the quantity of it increased from two drachms to nearly two ounces, for each injection. On July 22d, nearly two weeks after the introduction of the canula, he was well enough to walk out daily for half an

hour at a time. His pulse was then 104; his respiration 24. The sound of percussion was dull over the lower part of the left chest —less dull above. Indistinct bronchial respiration was heard below, and vesicular breathing above. Metallic tinkling was not heard at that date, but it had been shortly before. He had a fever-turn every afternoon; but his cough was reported to be slight, and his expectoration very little. He had no night sweats. His tongue was clean; his appetite fair; his sleep refreshing; and his bowels were opened daily. The canula was easily kept in place, and he complained of no inconvenience from it.

Up to this period, only an aqueous solution of iodine had been injected into the pleural cavity. On July 25th, one drachm of the tincture of iodine, diluted with water by means of the iodide of potash, was injected. The strength of the solution was gradually increased till the 1st of August, when about two drachms of the undiluted tincture was thrown in, after emptying the cavity and washing it out by repeated injections of warm water. This was followed by decided smarting and pain. For twenty-four hours, there was increased dyspnœa; pain in the left chest on motion, or coughing; heat of skin and greater rapidity of pulse. These symptoms then subsided, except soreness of the chest, which continued for about a week. For four or five days after this there was a marked diminution in the discharge, but it presently re-appeared. No farther trial was made of iodine injections. By August 2d, there was some leakage around the canula, and Mr. W. began to complain of it as a cause of irritation. It was therefore withdrawn, and the fistula dressed with a tent, compress and adhesive plaster. The same general treatment was continued. It should be mentioned that when the canula was inserted, a probe, five inches long, could be pushed its entire length into the chest, without meeting any obstruction. When the canula was taken out, 24 days after its insertion, a probe met with a large, spongy-feeling surface, at a distance of 2½ inches from the skin.

For a short time after this, that is, for two or three weeks, he remained without any marked change. There was a daily discharge through the fistula of four or five ounces of thick and purulent-looking matter. Its odor became more and more offensive, until at length the tent could not be removed, and the fluid allowed to escape, without employing chloride of zinc, or lime, to disinfect the atmosphere and the vessel into which it run.

Finally, the rational symptoms which ordinarily accompany phthisis declared themselves more unequivocally. His pulse became daily more rapid, till, toward the last of August, it averaged 120 per minute. Hectic fever re-appeared, and continued. He became greatly emaciated. His appetite failed or was capricious; his bowels were frequently loose; and he often vomited his food. On August 29th, respiration was puerile over the whole right back. A very feeble respiratory sound, without râles, was audi-

ble over the left back, except at the base, where none was perceptible. Percussion gave a dull, but not flat sound upon the left back. At the apex of the left front chest, percussion was still resonant. His cough had increased and become very troublesome, but he did not expectorate freely. The discharge from the fistulous opening continued as before. He went on thus, steadily sinking, day by day, and losing flesh to the extremest point of emaciation. For a few weeks before death, his lower limbs were anasarcous.

He died on the 4th of October, about six months after the attack of pleurisy, and about eighteen months after the commencement of cough and pulmonary disturbance. Unfortunately, no *post mortem* could be obtained.

Remarks.—The diagnosis in this case was, on the first examination, phthisis, commencing at the base and not at the apex of the lung. This diagnosis seems to be confirmed by the progress of the malady. Within a week after the commencement of medical treatment, the patient was exposed to cold and contracted a pleurisy. While the acute stage of the pleurisy was passing off, metallic tinkling was distinctly heard in the left back. The persistence of this sign and of tympanitic percussion at the apex of the left lung, with other symptoms, prove the existence of pneumo-thorax. The existence of effusion was demonstrated. There was in this case, therefore, phthisis complicated with pleurisy and pneumo-hydrothorax.

The treatment was guided throughout by the fact that tubercular disease was underlying all complications. If the former could not be controlled, it would be of little use to treat the latter. Accordingly, as soon as the acute stage of the pleurisy had passed, a generous diet and other measures, which were deemed important for the relief of the constitutional affection, were prescribed. Mercurials were given for a few days at first, but they were soon discontinued. Pneumo-thorax showed itself soon after the treatment was commenced, and of course rendered the prognosis more unfavorable than before.

Very evident relief was afforded by paracentesis. Before the first operation for tapping, the aspect of the symptoms and the history of the case were such as to render its propriety doubtful. Both Dr. Bowditch and myself thought it not improbable that the patient might die, either at the time of the operation, or so soon after it, as to lead to the inference that tapping was the cause of death. On the whole, however, it appeared to be our duty to give the patient the chance of relief which drawing off the effusion promised. The result was more favorable than we anticipated. The life of the patient was clearly prolonged by each operation.

The iodine injections were well borne. No indications appeared, after injecting the tincture of iodine, which would forbid its use.

On the contrary, the diminution of the discharge, and the slight constitutional disturbance which they produced, go to show that iodine injections into the pleural cavity may be safely used, and possibly, in some cases, with advantage.

The canula was not uncomfortable to the patient until it had remained in his side for more than three weeks. It was easily kept *in situ* by means of adhesive plaster—not by bandages.

The action of the fluid extract of veratrum viride as sedative to the circulation was evident. It produced some nausea; and, I thought, was followed by increased languor and weakness. I could see no evidence of curative action from it.

CONCLUDING REMARKS ON INTERMITTENT FEVER, WITH SUGGESTIONS CONCERNING THE VALUE OF EMETICS.

[Communicated for the Boston Medical and Surgical Journal.]

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In the preceding remarks on this subject, as well as in former articles in the JOURNAL, my predilection for the more frequent employment of emetics in various diseases has been clearly shown. The more frequently I use them, the more convinced am I of their real utility—almost invariably displayed in the forming stage of most diseases, and in the different stages and forms of that under consideration. Various reasons could be assigned for the less frequent use of this class of remedies, at the present day, than formerly was the case, or than they really deserve; nor would it be a difficult task to fill pages with extracts, from many writers of eminence on the practice, to prove the great confidence reposed in the curative power of emetics. But fearful of trespassing too far on your pages, and the desire of confining my remarks to observations deduced from bed-side experience, in reference to the perfect safety, and the less risk incurred from the use of an emetic, than is found frequently to result from the action of other remedies, preclude their introduction at this time, and force me to forego such valuable support in favor of my views.

If I may be allowed to judge of the well-marked and positively curative effects resulting from the use of emetics in the innumerable cases in which I have used them, in a great variety of diseases, they would be placed at the head of all remedial agents, for their prompt, decided, and immediate curative power, as well as for placing the system in a condition better adapted to the reception of subsequent remedies.

It may not be amiss, while advocating the importance and safety of emetics for the successful treatment of intermittent fever, as an adjunct to other remedies, to remark, that, while in all cases the use of one will prove beneficial, in some it may not be abso-

lutely required, or certain symptoms may contra-indicate its propriety at the time; but, in those of long standing, and complicated in various ways, the necessity of resorting to one is considered proven, as far as my observation has extended. Under the impression that the mode by which I produce vomiting, differs materially from that generally adopted, to which is assigned one reason for the non-occurrence of pain, spasm, or other inconvenience, it is needful to notice the particulars.

In presenting the formula of the preparation first used, as a prelude to the real emetic, which is continued subsequently for several days, more particularly if the liver has been much implicated, be it noted that the quantity of each article is necessarily varied, to meet existing indications, though in general the following is employed. R. Nit. potassæ, ʒiii.; bi-carb. sodæ, ϑii.; aquæ destillat., ʒ v.; syrup. ipecacuan., ʒ iij.; tr. opii camph., ʒiv. In some cases, the syrup of morphia is substituted for the paregoric. The dose varies according to circumstances—being from two to four tea-spoonfuls every hour for from two to four times. To the last dose is added four ounces of warm salt water, in which there is mixed one tea-spoonful of ipecacuanha and from four to ten grains of cayenne pepper. This being swallowed, as soon as efforts to vomit appear, two or more pints of warm salt water are given as rapidly as possible, and it is rare that profuse vomiting does not occur, although, in a few cases, that quantity has been retained without causing vomiting, while it has acted freely on the bowels, without causing serious inconvenience from the temporary extra-purgation. The vomiting being over—causing only that inconvenience inseparable from the act itself, known to all to be disagreeable, and, in my opinion, the only rational objection to popularizing the habitual use of emetics in various diseases—a mustard and cayenne poultice, strong or weak, as may be required, is applied to the abdomen for various reasons, one being its power to control or prevent spasm, or pre-existing irritation, or inflammation. When removed, one of flax-seed meal generally supplies its place, and is kept on as long as the nature of the case may seem to demand. At the expiration of three hours, the preceding mixture is given, in the dose of one or two tea-spoonfuls every one or two hours, for several days, with or without the usual tonic remedies, necessarily depending on circumstances. At the proper time, after the action of the emetic, should it be requisite to act yet more on the bowels, a large injection of strong salt water, preceding or followed by two modified blue pills, or a dose of calomel, often conjoined with one of Dover's powders, are given, the last generally at bed-time. It is not unusual to conjoin with the last dose, portions of the sulphate of cinchona, or quinine, and powdered nitrate of potash. Purgatives, or mild laxatives, with the nitrate of potash mixture—to which, when first prepared, there is frequently added three or four drachms of Fowler's solu-

tion of arsenic—are continued for several days, or until I may consider the proper time for the exhibition of quinine, and other tonics, to have arrived.

Before noticing the formulæ of the different anti-periodics and tonics, which have been used, it may not be amiss to cursorily notice the diet allowed to my patients for the first few days. Gruel, arrowroot, and soup, are only allowed, and in some cases in specified quantity, until the system may be considered ready for the full diet of the hospital. It may not be unworthy of remark, that to all of the patients admitted into my wards, without an especial medical reason for the contrary, not one drop of alcohol or malt liquor is allowed, and although the habits of many admitted frequently induce them to ask for the former, it is uniformly withheld, and, to this day, in but three instances has the least inconvenience resulted from such forced temperance. To supply the craving for such drink, and at the same time to invigorate the systems of all, there is prepared, in both wards, a pitcher of a tonic infusion, made of Peruvian bark, Virginia snakeroot, quassia, colombo, wild cherry bark, &c., ground and mixed. *Nolens volens*, a wine-glass is given by the nurse three or four times a day to all for whom it has been ordered. I am certain that this tonic drink is in all respects more efficient than alcohol, or porter, to strengthen my patients, and enable them to leave the wards without much fear of a relapse.

Assigning as reasons for my conviction of the propriety and necessity of the more frequent use of emetics, the following facts are adduced. The most frequent result of an emetic is the ejection of undigested food, mixed with more or less of black, green, or yellow bilious secretions, the quantity of such matter being frequently surprisingly large. It has been of occasional occurrence, that, not having deemed it necessary, in a case, to give an emetic, from the apparent mildness of the symptoms, in the course of one or two days, notwithstanding the use of purgatives and injections, unexpectedly there would be thrown up a large quantity of bile, more frequently of a blackish or dark green color, when, even at that late period, an emetic of ipecac and warm salt water being given—which it always is—a great quantity of dark-colored bilious matter would be ejected. In some cases, where the tongue has presented almost a natural appearance, without any well-marked symptoms of aught but malaise, but in which I was convinced an emetic would put all straight, upon its free action a large quantity of dark bilious matter has been thrown off, followed by an immediate restoration to a natural feeling, and the desire to be discharged and go to work.

The above facts, which defy contradiction, suggest a plain and pertinent question for the consideration of those who may not have fully looked at the subject, not only as to the positive benefit of an emetic, but of its greater safety and superiority to the more

common and agreeable purgative, mostly in pill form, in respect to the actual amount of irritation or inflammation of the mucous membrane of the alimentary canal, immediately or remotely. By comparison, it will be seen that, by an emetic, the contents of the stomach are removed upward, through a distance of from ten to fifteen or twenty inches, or thereabouts, over a mucous membrane unaffected in any manner, and little disposed to become so in such cases. After the full operation of an emetic, which does act powerfully on the liver, and frequently causes an evacuation of the bowels, should there be a necessity of acting still more on them, an injection, or any mild remedy, will be found sufficient in most cases. Contrast the probable effects of the operation of one or more cathartics, to evacuate the stomach and bowels, which it is presumed few will deny the necessity of doing at the commencement of most diseases, be they what they may. In the first place, it is impossible for any one, *a priori*, to tell with certainty what number of doses or what quantity of medicine will be required to accomplish the object desired, as is well known to all. Then, whatever may be given, it, with the contents of the stomach and bowels, must, to be evacuated, pass through a distance of about six times the length of the body of the individual, and over a mucous membrane, if not in a state of irritation or inflammation, most certainly prone at any moment to have one or both aroused into action. Can any one doubt, with such facts presented, either the propriety and necessity of emetics, or that the retention in the stomach of such foreign matter, or its forced passage through the bowels, must add to the discomfort of the patient, very materially augment, if not produce inflammation, protract the duration of the disease, and be far more calculated to do injury than can possibly result from the action of a single emetic, whose effects are most generally over in fifteen minutes.

I will conclude these unavoidably prolonged remarks, on subjects to my mind most important, in a practical bed-side point of view, by presenting the more active formulæ of anti-periodic or tonic remedies, which, having largely used in a great number of cases, I do think I have the right to speak of with confidence. R. Zinci sulph. pulv., ʒss.; quinin. sulph., ʒi.; pulv. capsici, ℈i.; pulv. cinchona rub., ʒi. M. Dose, one half to one teaspoonful three times a day. R. Zinci sulph. pulv., ʒss.; quinin. sulph., ʒiss.; tr. capsici, ʒiv.; tr. opii camph., ʒvi.; tr. rhei et sennæ, ʒvi.; syr. ipecacuan., ʒiv.; tr. quassiæ, ʒij.; tr. cinchon. comp., q. s. pro ʒviij. M. Dose, one half to one teaspoonful three or four times a day. During the month of September, the number of emetics given in my two wards was about eighty, as I find by referring to my book of prescriptions. In not one instance was aught but benefit received.

EMPHYSEMA AND DEATH AFTER A BAYONET WOUND.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—The following statement of the case of Charles W. Banks, the young man wounded at the "Seymour reception," is sent to you for the purpose of correcting the gross misrepresentations contained in an article published in your JOURNAL for Oct. 13th, 1859.

On the 30th of August, 1859, Dr. Jewett, of New Haven, received a message from Meriden, to come there by the first train; stating that a man was dangerously stabbed. He arrived in Meriden at 6.30, P. M. The patient was found to be Mr. C. W. Banks. The history of the case, as given by his friend Mr. Fairman, was, that Banks had been stabbed with a bayonet, at Hartford, a few hours previous; that he was seen in Hartford by Dr. Ellsworth, who probed the wound, and applied some adhesive plaster, at the same time telling Banks that he was not seriously injured, and that he had better go home—a distance of some 45 miles. When told by Banks that he *was* seriously injured, and that he did not feel able to ride, Dr. Ellsworth remarked, "You are frightened; you are not seriously injured, but you will be well in a few days; it is a mere scratch." Banks took the cars for New Haven. Soon after leaving Hartford, he was taken with severe pain in the injured side, difficulty of breathing, and hæmorrhage from the wound. The plasters became loose. On his arrival in Meriden he found it necessary to leave the cars. He was taken to the Hotel. He began to vomit soon after being placed in bed. When Dr. Jewett saw him, at 6.30, P.M., he was suffering from severe pain in the right side, in the region of the wound, vomiting, and belching of gas from the stomach. On examining the wound, an emphysematous spot the size of the *two hands* was seen surrounding the wound. The respiratory murmur was distinct over the whole of the right side, but somewhat feeble. On introducing the probe, it passed in, about half an inch perpendicularly. Dr. Jewett then inquired of Messrs. Fairman and Banks what position he was in, when the wound was received. On being informed as to this point, he passed the probe obliquely upward and backward for about two inches. He then told Dr. Churchill that the chest was punctured and the lung *probably* wounded slightly; but that it was not best to make any further explorations with the probe, although he was satisfied that the probe did not enter the chest, and told Dr. Churchill that it did not. Dr. Jewett informed Drs. Catlin and Churchill, at a later period in the case, that in consultation with Dr. Knight, they came to the conclusion that the air might have caused the emphysema in two ways. First, from a slight wound in the lung. Second, from the air entering the cavity of the chest through the bayonet wound, and being expelled by the act of respiration. But owing to the valvular character of the wound, we did not think it *probable* that the air entered the cavity of the

thorax in the latter way. Dr. Jewett recommended Dr. Churchill to give him morphine, and, as soon as the stomach was quiet, to give a full dose of calomel. He also changed the position of Banks on the bed, so that the wounded side was dependent. When this was done, the hæmorrhage, which had ceased, returned and continued for several hours. This afforded him some relief. The calomel was given some time during the night of Tuesday. On Wednesday, Dr. Jewett did not visit Banks.

Dr. Ellsworth saw him on Thursday, at the request of some of the military gentlemen of Hartford. At his interview with Dr. Churchill, Dr. Ellsworth insisted that the *lung* was not wounded; but apologized to Dr. Churchill for not having detected the puncture into the thorax, by saying that he was in an "Irish shanty without assistance." He warned Drs. Catlin and Churchill of the danger of inflammation, and recommended that he be bled "as soon as he would bear it." On his return to Hartford, he told the military gentlemen that the *wound* was of no consequence; that Banks was suffering more from indigestion than the wound; and that if he died, he (Dr. E.) "could not tell what killed him." He also said that the attending physicians had overlooked the condition of the stomach and bowels. The newspapers of Hartford stated, at this time, that they were assured by Dr. Ellsworth that Banks was not seriously injured, but was suffering from "pea-nuts" that he had eaten during the day, on Tuesday.

Dr. Jewett did not see Banks again until Thursday evening, at about 6.30. At this time Banks was suffering from pain in the right side and difficulty of respiration. His pulse was full, hard and frequent. The cathartic had operated with some relief to the pain in the stomach. He was put upon small doses of antimony, and the morphine was continued. He was also taking small doses of calomel. Auscultation and percussion at this time showed that there was air in the cavity of the chest. The sound, on percussion, was more resonant than natural. There was also decided evidence of inflammation of the pleura. Dr. Jewett, at this time, told Drs. Catlin and Churchill that the lung was partly compressed.

Dr. Jewett saw him again on Friday, at 6.30, P.M. He had been bled on Friday morning. On examination of the chest, the clear sound was more distinct at the upper portion, and for nearly two thirds of the anterior portion of the wounded side; but the lower portion was dull on percussion. Respiratory murmur to be heard at the upper part of the chest. Dr. Jewett remarked to Drs. Catlin and Churchill that there was both air and serum in the cavity of the chest. The left lung continued to perform its duties well, and showed no signs of compression; nor was there the slightest symptom of asphyxia. The pulse at this time was full, hard and frequent, about 130 in the minute. Dr. Churchill attempted to bleed him again on Friday evening, but did not suc-

ceed. He became somewhat faint, and the effort was not continued.

On Saturday, Dr. Jewett saw him again at 6.30, P.M. He was then in a hopeless state. His pulse was very small, frequent and thready, and slightly irregular. He was evidently failing fast. The left lung continued to act well, and showed no sign of compression. He continued to fail during the night, and until he died, on Sunday, at half past 2, P.M. There was not one solitary symptom of *suffocation* present. His life was undoubtedly prolonged by the fact that the left lung continued to perform its office to the last.

Dr. Jewett was unavoidably absent from Saturday evening to Monday morning; and consequently was not present at the *post-mortem* examination.

Post-mortem examination of the body of C. W. Banks, made by Dr. J. Knight on Sunday evening, some 7 hours after death. Present—Drs. J. Knight, B. H. Catlin, E. W. Hatch, A. H. Churchill and Willey.

Nothing unusual in the external appearance of the body, except the wound. Rigor mortis complete. Wound in the right side of the chest, 12 inches from the lower end of the sternum, 8 eight inches from the centre of the vertebral column, 12¼ inches from the acromion process of the scapula. Wound 5-8 of an inch long. Intestines very much distended with air. The omentum very much injected with dark blood. The arch of the colon somewhat injected with dark-colored blood externally, internally healthy. The lower portion of the ileum, for 12 or 15 inches, injected with dark blood both externally and internally. Examined the next day, more diseased than it appeared to be at night. Mucous membrane very dark red and considerably softened. Could be scraped off with some difficulty. Stomach distended, very much, with flatus; containing from a gill to a half pint of dark greenish fluid. Coats of the stomach perfectly healthy. Liver full size and perfectly healthy. Gall-bladder small size, containing a moderate quantity of healthy bile. Spleen natural and healthy. Urinary bladder empty. Left kidney perfectly healthy; right not examined. The right cavity of the chest discharged a large quantity of fœtid air as soon as punctured. *The pericardium contained a full gill of yellowish turbid fluid, in which there was a deposit of white fibrinous matter, some of which adhered to the outer surface of the heart. The outer surface of the heart was rough. The appearance was that of a rapid inflammation.* The *right* lung almost entirely collapsed, except a small portion at the top. Externally, the muscles immediately around the wound were of a dark color, and very much infiltrated. The probe, following a narrow wound, entered the cavity of the thorax, running *obliquely upward and backward*, passing over the 8th rib, and *entering the chest* between the 7th and 8th ribs. The right cavity of the chest contained, in addition to the air that escaped when it was first punctured, a quantity, from one quart to three pints, of a dark-colored offensive fluid. *The inner surface of the cavity of the chest and the outer surface of the lung were very much roughened and nearly black; in fact, in a state of incipient gangrene, especially the inner surface of the chest.* The right lung was injected with dark-colored blood. No wound was found in the lung.

The above is a copy of the notes taken at the examination of Banks, and is correct. J. KNIGHT.

The foregoing is a full and correct statement of the case, with the *post-mortem* examination. By comparing this with the article in your JOURNAL for Oct. 13th, you will see that the latter is not a *true* statement of the case, but a gross *misstatement*. For example—

1st. It is *not* true that the probe was supposed to have entered

the chest. The history of the case shows, that if the bayonet did not pierce the chest, it must have been the probe used by Dr. Ellsworth; for we have no evidence of emphysema until after his examination. The emphysema disappeared rapidly after he was examined by Dr. Jewett on Tuesday evening. It did not increase.

2d. It is *not* true that the presence of serum was not suspected.

3d. It is *not* true that the case was treated as one of hepatized lung; and the "published testimony" does *not* prove this.

4th. It is *not* true that Banks breathed with only one half of one lung. The left lung did not suffer from compression.

5th. It is *not* true that Dr. Ellsworth was informed that the probe passed *into the lung* for two inches. Nothing of the kind was said to him, by either Drs. Catlin or Churchill.

6th. It is *not* true that the first examination by auscultation and percussion was made by Dr. Ellsworth on Thursday. It was made by Dr. Jewett on Tuesday evening.

7th. It is *not* true that Dr. Knight could not pass the probe into the chest, at the *post mortem*, without violence. It is true that this could not be done through the bayonet wound; but when the skin and cellular substance were dissected back and the internal wound disclosed, the probe passed readily and without any force, into the cavity of the chest.

8th. It is *not* true that Banks complained more of his bowels for "some three days" than he did of the wound.

9th. It is *not* true that Dr. Knight testified that there was no wound of the lung. He said that he did not expect to find the wound of the lung, but that it was *probably* wounded.

10th. It is *not* true that all the phenomena presented themselves that are found in asphyxia from empyema. There was not a symptom that indicated this.

11th. It is true that the pericardium was inflamed, and so was the surface of the heart, and covered with patches of lymph.

12th. The author of the article in question omits to mention that the *pleura* was in a state of *incipient gangrene*.

We have sent you the foregoing, simply that the profession may have an opportunity of reading a *true* statement of the case. Here we leave the matter, not being willing to enter into a controversy with your anonymous correspondent, who has taken such an unprofessional mode of bringing the matter before the public, as we are satisfied it would lead to a mere personal controversy.

P. A. JEWETT,
B. H. CATLIN,
A. H. CHURCHILL.

MESSRS. EDITORS,—The published reports of the testimony of Dr. Catlin were imperfect and in some cases false. I stated that I did not examine the chest by auscultation at my first visit, Wednesday P.M. The most prominent and distressing symptom at that

moment being severe pain in the stomach and bowels, with tympanitis, I recommended thorough evacuation by unirritating cathartics and injections. His bowels were very torpid, but free evacuations were obtained Thursday morning, which afforded much relief, so that when Dr. Ellsworth saw him, early in the afternoon, he was more comfortable than at any time during my attendance. Dr. Ellsworth had made his examination before my arrival. He stated to us that he found a dulness of sound on the lower part of the right (injured) side; and there was some dulness also on the left side, which corresponded exactly with the result of my first examination made the same day, as far as the *right side* was concerned. I *never* found any difficulty on the *left side*, and the autopsy proved there was none. I designed to give only a very general statement of the case before the jury and Police Court. If I said there were symptoms of inflammation of the lungs, I used a word that did not convey my meaning. I intended to say inflammation of the chest. That was the idea I intended to convey. I never doubted there was inflammation of the pleura. Dr. Ellsworth suggested no change in the treatment, only that we bleed "*as soon as he would bear it.*" The danger, he said, was of inflammation. He said not a word about effusion or paracentesis. He never read to me a word from any medical author, though I saw him have a book with him. Drs. Churchill and Catlin could not have informed Dr. Ellsworth that *they* or Dr. Jewett had passed a probe *two inches* into the lung, for they never probed the wound at all; and never heard that any one ever claimed to have passed it even into the cavity of the chest, till they saw it passed at the *post mortem*.

I am unable to see that the personal matter, introduced in the last section but one in the article in the Journal, has any connection with surgical science or practice, or that it can be of any interest to the profession; but it is proper to answer it. Drs. Catlin and Churchill have no recollection of being requested to inform the friends of the prisoner, or the officers of the guard, if the patient grew worse; and never thought of the thing till they saw it in the Journal. The grand jurors or jury of inquest made arrangements for the *post-mortem* examination, without the knowledge or advice of Dr. Catlin, and against the advice of Dr. Churchill. On the contrary, they both opposed its being done Sunday night, and only consented to assist in it after the arrival of Dr. Knight, who said it was proper to attend to it then, and he must return in the 1 o'clock, A.M., train. B. H. Catlin.

I fully concur in the above.

A. H. Churchill.

New Haven, Oct. 22d, 1859.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 27, 1859.

Singular Hoax.—The London *Medical Times and Gazette* of Oct. 8th contains the account of singular attempt at imposition, if the whole affair be not a complete hoax, which an individual in this country has attempted to perpetrate upon members of the medical profession in England, and which consists in an offer to sell medical diplomas to applicants without residence or examination. It seems that a Mr. Dale, of Yorkshire, has lately received a letter from an individual styling himself "Dr. Bellamy, T.P.S.S., Clarksville, Cayuga County, N. Y.," offering to transmit a Latin diploma, with a Latin thesis of 100 pages, with 200 printed copies of the same, for the following consideration:—£5 to the "Latin Secretary," as hush money, for presenting the proposal before the "Faculty," and £30 for Bellamy's services. The letter is dated "Auburn Street, Hudson, N. Y., Aug. 16, 1859." The writer proposes that Mr. Dale should act as agent in obtaining applications for these fraudulent diplomas, and gives the names of several parties in England who have already applied. He also acknowledges the receipt of £5 from Mr. Dale. The *Times and Gazette* states that Mr. Dale has no acquaintance with the writer, and has never transmitted money to America for the purposes alleged, and the same journal hopes "the universities of America will repudiate all connection with proceedings so questionable."

We can assure the *Times and Gazette* that there is not the least danger that any university or medical school in America would sanction such transactions. Either the letter is a most absurd hoax, or, what is more likely, is the production of an insane man. There is no "Latin Secretary" in any university or college in America, to our knowledge, and there is no such place as Clarksville in Cayuga County, N. Y. We do not believe it possible for a diploma (other than an honorary one) to be given by any American college to a person who has not attended the lectures and submitted to the examinations of all the professors who sign it. The absurdity of the thing is so palpable that we wonder that so respectable a journal as the *Times and Gazette* should treat it seriously.

Vaccination.—In common with other members of the profession in Boston, we have received from Dr. Clark, City Physician, some fresh vaccine lymph derived from stock recently obtained from the National Vaccine Establishment, at London, and accompanied by the printed instructions relating to vaccination which are promulgated by this establishment. Dr. Clark urges upon the profession the importance of *re-vaccinating* all the members of a family in which there happens to be a case of variola or varioloid, remarking that "it now seems quite proved that *all persons in whom re-vaccination has been repeated until it ceases to 'take,' will forever be perfectly secured against any attack of varioloid as well as of variola.*"

We hope this advice will be followed by all those having under their charge cases of variola and varioloid, and we would urge upon the

profession the importance of extending the practice of vaccination as far as possible, even among those who are not directly exposed to variolous infection, in view of the epidemic which has now existed in Boston since February last, and which has already destroyed 83 lives, all of which might have been saved had the necessary precautions been taken, to say nothing of the vast amount of suffering occasioned by the disease in cases which were not fatal. The number of deaths has varied from 1 to 6 per week, there having been but eight weeks in each of which no death from this cause occurred. The apathy of the public on this subject is astonishing; not only do many persons neglect to be vaccinated, or to have their families vaccinated, but in many cases, through prejudice or obstinacy, they refuse to have it done. The fact is, there ought to be a city ordinance empowering the City Physician to enforce vaccination whenever in his opinion the public health requires.

THE CASE OF CHARLES W. BANKS.—We publish to-day a statement from Drs. Jewett, Catlin and Churchill, in reply to an article which appeared in this JOURNAL for October 13, on a case of death following a wound from a bayonet. Our readers will see that it places the matter in a wholly different light, and they will judge for themselves of the merits of the case. It is unfortunate that in a controversy like the present, the *facts* upon which the whole issue depends can only be derived from the statements of the parties concerned, and not from any source which, however respectable in itself, would be considered evidence in a court of justice. We have no desire to implicate either party in a perversion of the truth, but it is difficult to reconcile the two statements now given us.

The main points in the case are these:—Was the hydro-pneumo-thorax discovered before death, and when; and what was the treatment? Dr. Jewett states, that on the evening of Friday he discovered fluid and air in the right chest, and told Drs. Catlin and Churchill of the fact; this is the reverse of what we are led to infer from the first account. Of course the treatment of hydro-pneumo-thorax is plain enough, if its existence endanger the life of the patient; the chest is to be punctured. But according to the statement of Drs. Jewett, Catlin and Churchill, there were no signs of asphyxia, and the certified report of the autopsy shows that there was pericarditis, and also a condition of the pleura approaching gangrene, facts with which we now become acquainted for the first time, and which fully explain the critical state of the patient. Whether under such circumstances it would be advisable to operate, might well be a matter of doubt. What the exact circumstances were which should decide the question in this particular case, we have not the means of knowing.

We lament that the case should have given rise to a personal controversy, which rarely leads to a satisfactory result to either party. Whatever may be our own prejudices in this instance, our official opinion must be decided only by the facts, and until those facts are presented in a more authentic shape than at present, we must withhold the expression of any opinion on the merits of the case. For these reasons, also, we trust that the controversy will cease with the present number, and we will only add that nothing further can be admitted on the subject unaccompanied by the name of the writer, which is of course in all cases known to the editors.

MEDICAL SCHOOLS IN NEW YORK.—The introductory lecture at the opening of the winter session of the College of Physicians and Surgeons, was delivered on Monday evening, 17th inst., by Prof. Alonzo Clark, consisting in part of a eulogy on the late lamented Prof. Elisha Bartlett.—On the same evening, Prof. Van Buren opened the winter course at the University Medical College by an introductory address.—On Tuesday evening, the 18th, Prof. James Bryan delivered the introductory lecture at the New York Medical College, the subject of which was the "Medical Profession and its Claims."—The winter course of instruction at Bellevue Hospital was also opened on the 17th by the venerable and distinguished Dr. J. W. Francis. In stating the advantages of clinical instruction in New York, he remarked, according to the *Medical Press*, that *eight hundred* languages are spoken in that city! Has not our cotemporary exaggerated somewhat the real statements of Dr. F., who is remarkable for the accuracy of his facts? The Philadelphia *Med. and Surg. Reporter*, in noticing the address, has it *eighty* different languages.

SOUTHERN RESORT FOR INVALIDS.—Dr. Augustus Mitchell, a former correspondent of this JOURNAL in Maine, is about leaving his northern home for a permanent residence in St. Augustine in Florida. We understand that he intends paying particular attention to those invalids from the North who may seek a more genial climate, in that favored locality, for the restoration of health or the arrest of threatened pulmonary disease. It is also his intention to establish a botanic garden in Florida, for the introduction and cultivation of tropical plants. We trust his highly laudable plans will be attended with success to himself and to all others who may be interested.

ARREST OF EXCESSIVE EPISTAXIS.—Dr. E. A. D'Arcy, of Jerseyville, Ill., relates, in the Philadelphia *Medical and Surgical Reporter*, a case of profuse bleeding from the nose, which, after trying all the ordinary methods, was arrested as follows. A sheep having been killed, its œsophagus was ligated at one end and introduced through the whole extent of the nostril. Water was then poured into it, the front end was also ligated, and compression made upon it with the hands until the pressure produced severe pain in the nares. The bleeding at once ceased, and did not return. It may be well to state that the common intestine used in sausage-making was tried previous to the œsophagus, but burst in the nostril.

THE winter session of lectures in the Massachusetts Medical College, it will be borne in mind, commences on Wednesday next, with an introductory by Dr. BOWDITCH.

HEALTH OF THE CITY.—The chief features of the mortality of the past week are 4 deaths from disease of the heart, 2 from smallpox and 2 from syphilis. The number of deaths of subjects under 5 years of age was 24. The cases of smallpox were both males, one a child, and the other an adult of 69 years. The patients who died from disease of the heart were all females, aged respectively 7, 47, 50, and 66. The total number of deaths for the corresponding week of 1858 was 60, of which 9 were from consumption, 1 from pneumonia, 1 from disease of the heart and 5 from casualties.

ERRATUM.—On page 221, tenth line from the bottom, the quotation marks should be omitted.

Books and Pamphlets Received.—Gustaf von Düben's Treatise on Microscopical Diagnosis. With 71 Engravings. Translated, with additions, by Prof. Louis Bauer, M.D., &c.

MARRIED,—At Holden, 20th inst., Albert B. Robinson, M.D., to Miss Susan L. Chenery, formerly of New York.

DIED,—At Hancock, N. H., Dr. Dewitt C. Hadley, aged 55 years.

Deaths in Boston for the week ending Saturday noon, October 22d, 68. Males, 35—Females, 32.—Accident, 1—disease of the bowels, 1—inflammation of the brain, 3—consumption, 19—convulsions, 2—croup, 1—cyanosis, 1—diarrhœa, 4—dropsy, 1—dropsy in the head, 2—dysentery, 1—debility, 2—infantile disease, 1—scarlet fever, 2—typhoid fever, 1—gangrene of the lungs, 1—disease of the heart, 4—hemorrhage, 1—intemperance, 1—inflammation of the lungs, 1—disease of the liver, 1—marasmus, 3—old age, 1—palsy, 3—smallpox, 2—suicide, 1—syphilis, 2—teething, 1—ulceration of the throat, 1—unknown, 3.

Under 5 years, 24—between 5 and 20 years, 6—between 20 and 40 years, 18—between 40 and 60 years, 10—above 60 years, 10. Born in the United States, 46—Ireland, 22—other places, 9.